ARCAS

Assault Rifle Combat Application System

Elbit Systems™

Security & Tactical EO Solutions – ELSEC

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The Assault Rifle Combat Application System (ARCAS) is a unique computer platform for assault weapons designed for the future infantry soldier. ARCAS provides a wide range of advanced capabilities for enhanced combat lethality, soldier survivability and improved situational awareness, connecting to various applications, reconnaissance networks and combat management systems.

Flexible design and configurations

ARCAS transforms any assault rifle into a smart weapon. The flexible solution can be modified to existing equipment and customized to operational requirements, offering two configuration options that enable using a thermal or electro-optic sight.

ARCAS 1:

System includes a built-in weapon sight

ARCAS 2:

Enables use of any weapon sight, as needed

Shooting out of position

ARCAS is designed to relay data through the weapon sight.

The images from the optic system are sent directly to the eyepiece and displayed on a cutting-edge user interface with unique digital display technologies, providing the soldier with new shooting options – such as shooting out of position or around corners.

Unique operational capabilities

ARCAS features open a world of possibilities:

- Automatic Target Recognition (ATR)
- Video Motion Detection (VMD)
- Smart Navigation
- Fire and Motion Detection
- Range Estimation
- Ballistic Correction

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Sophisticated applications and advanced technologies

ARCAS supports the development of applications in an open architecture environment, enabling integration of additional assault weapon solutions. The system features a wide range of advanced applications, incorporating advanced sensors, artificial intelligence (AI) software and augmented reality (AR) capabilities.

Situational Awareness

- Friend or foe identification
- Video anchoring of the scene
- Connection to C^2/C^4I systems
- MESH communication

Survivability

- Shooting from shelter
- Identifying targets
- Day camera
- Shooting detection
- Movement detection

Lethalness

- Cold calibration
- Control of weapon stoppage
- Fire control
- Shooting from the waist
- Automatic passive range estimation
- Day and dusk vision
- Shot counter
- Night vision

Additional Capabilities

- [•REC] Recording
- Compass
- WI-FI, BT
- Internal microphone
- Energy in the strap
- Training mode
- Navigation
- Paramedic assist
- GPS

Technical Specifications

		17µ ARCAS	12µ ARCAS
Thermal sensor		Uncooled 640x480 17µ	Uncooled 640x480 12µ
HFOV		27°	
Human Target DRI Ranges	Detection	580m	
	Recognition	250m	
	Identiffication	120m	
Display type		800x600 OLED	
Total weight (inc. batt.)		1000g	850g

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